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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,250	10/17/2005	Hiroshi Kase	00005.001217.PC	6976
5514 7590 10/18/2007 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			EXAMINER CLAYTOR, DEIRDRE RENEE	
			ART UNIT 1617	PAPER NUMBER
			MAIL DATE 10/18/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/553,250

**Applicant(s)**

KASE ET AL.

**Examiner**

Renee Claytor

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 20-25,31,69 and 70 is/are pending in the application.
- 4a) Of the above claim(s) 22,25,31,69 and 70 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20,21,23 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Applicant's response on 8/7/2007 is acknowledged. Applicants have cancelled claims 1-2, 7-19, 26-30 and 32-38 and added new claims 69-70.

Applicants argue that the priority date of the Grzelak (US Pg-Pub 2006/0128694) reference does not go back to 2002 because (E)-8-(3,4-dimethoxystyryl)-1,3-diethyl-7-methylxanthine was not disclosed in any of the priority documents. The Examiner agrees with this assertion and the rejection over Grzelak reference is hereby withdrawn. Applicants further argue that Matsuoka does not teach the use of A<sub>2A</sub> antagonists for treating anxiety but only teaches using dual A<sub>1</sub>A<sub>2A</sub> antagonists to treat Parkinson's disease. Though the compounds of the invention are described as A<sub>1</sub>A<sub>2A</sub> antagonists, the compound of Formula III has overlapping groups with that of the present invention and therefore reads on compounds with the same core structure. In addition, Matsuoka teaches that the compounds are used to treat symptoms of Parkinson's disease, which include anxiety. Therefore, Matsuoka teaches the use of compounds of the same base structure and overlapping groups in treating such disorders as anxiety.

The following new grounds of rejection are being given below.

### ***Claim Rejections – 35 U.S.C. § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-21 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirani et al. (Synapse 42:164-176, 2001) in view of Matsuoka (EP 1 177 797).

Hirani et al. teach  $A_{2a}$  antagonists corresponding to formula (I), including the elected species, of the present application. Hirani et al. exemplify (E)-8-(3,4-dimethoxystyryl)-1,3-diethyl-7-methylxanthine in Figure 1 and teach it as an  $A_{2A}$  antagonist (page 165, last paragraph in Introduction). It is taught that this compound is investigated as an antiparkinsonian agent (page 165, last paragraph in Introduction).

Hirani et al. does not specify that the  $A_{2a}$  antagonists treat anxiety.

Matsuoka et al teach  $A_1/A_{2a}$  antagonists of the same basic core structure as formula (I) of the present claims and overlapping groups as with formula (I) of the present claims (see page 16, formula III). Matsuoka et al. further teach that the  $A_1/A_{2a}$  antagonists are used to treat symptoms of Parkinson's disease, including anxiety (paragraph 0007).

Accordingly, one would be motivated to combine the teachings of Hirani et al., which teach that (E)-8-(3,4-dimethoxystyryl)-1,3-diethyl-7-methylxanthine is an  $A_{2a}$  antagonist that treats Parkinsonian symptoms, with the teachings of Matsuoka et al. which teach that  $A_1/A_{2a}$  antagonists with the same core structure of the present claims, is useful in treating anxiety in Parkinson's patients. Because the patient population overlaps in that both sets of patients in the prior art references have similar Parkinson's extrapyramidal effects, and a symptom of Parkinson's disease includes anxiety as taught by Matsuoka et al., one would be motivated to use (E)-8-(3,4-dimethoxystyryl)-

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1,3-diethyl-7-methylxanthine to treat anxiety because Hirani et al teaches this compound as a treatment for symptoms of Parkinson's.

### ***Conclusion***

No claims are allowed.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renee Claytor whose telephone number is 571-272-8394. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Renee Claytor



SREENI PADMANABHAN  
SUPERVISORY PATENT EXAMINER